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A SYSTEM FOR QUANTITATIVE RADIOGRAPHIC IMAGING

ABSTRACT OF THE DISCLOSURE

A system for spectroscopic imaging of bodily tissue in which a scintillation screen and a charged coupled device (CCD) are used to accurately image selected tissue.

An x-ray source generates x-rays which pass through a region of a subject's body, forming an x-ray image which reaches the scintillation screen. The scintillation screen reradiates a spatial intensity pattern corresponding to the image, the pattern being detected by a CCD sensor. The image is digitized by the sensor and processed by a controller before being stored as an electronic image. Each image is directed onto an associated respective CCD or amorphous silicon detector to generate individual electronic representations of the separate images.